UTAH DIVISION OF AIR QUALITY MODIFIED SOURCE PLAN REVIEW

S. Gale Chapman, President Intermountain Power Service Corporation 850 West Brush Wellman Rd Delta, Utah 84624

N0327-012

RE:

Experimental AO to Test Overfire Air

Millard County, Utah CDS-A, ATT, Title V, NSPS

REVIEW ENGINEER:

Nando Meli Jr.

DATE:

April 15, 2003

NOTICE OF INTENT DATED:

April 9, 2003

PLANT CONTACT:

Dennis Killian

PHONE NUMBERS:

(435) 864-4414

FAX NUMBER:

(435) 864-0994"

I'LANT LOCATION:

850 West Brush Wellman Road Delta, Millard County, Utah

UTM COORDINATES:

4,374.4 km Northing, 364.2 km Easting, Zone 12

datum NAD27

APPROVALS:

Peer Engineer

Rusty Rule

DAQ requests that a company/corporation official read the attached draft/proposed Approval Order conditions. If this person does not understand or does not agree with the conditions, the PLAN REVIEW ENGINEER - TECHNICIAN should be contacted within five days after receipt of the conditions. If this person understands and the company/corporation agrees with the Approval Order conditions, this person should sign below and return (can use FAX # 801-536-4099) within 10 days after receipt of the conditions. Thank You.

Applicant Contact Made

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I. <u>DESCRIPTION OF PROPOSAL</u>

The Division of Air Quality (DAQ) issued an Experimental Approval Order (AO) #DAQE-AN0327011-03, dated February 14, 2003 to the Intermountain Power Service Corporation (IPSC) so that IPSC could install a multi-port overfire air system to control NO_x generation from coal combustion. The experimental AO further allowed operation of the OFA system for trial testing to obtain data for further permitting, not to exceed 150 days from the date of the Experimental AO. Testing is being performed to demonstrate the effectiveness of overfire in NO_x control, as well as data collection that the DAQ can use to make a final determination in permitting continuous operation of the OFA system.

IPSC is requesting an extension to the Experimental AO to allow operation of the OPA system for the mercury testing. IPSC is planning to perform additional mercury testing in preparation for EPA's new mercury MACT standard for utilities. IPSC was originally tested for the MACT standard in 1999. Since then the unit configuration has been changed (OFA, greater heat input, scrubber wall rings), IPSC wants to retest in concert with other industry parties, including the Electric Power Research Institute (EPRI) and the Utility Air Regulatory Group (UARG). Although the specific time frame has not yet been determined, the test will consist of a 30-day continuous on-line monitoring analysis, with mercury stack tests interspersed throughout the same period. To optimize the effectiveness of the testing IPSC needs to operate as close as possible to normal operating scenarios, including the use of OPA.

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II. RECOMMENDED EXPERIMENTAL APPROVAL ORDER.

S. Gale Chapman, President Intermountain Power Service Corporation 850 West Brush Wellman Rd Delta, Utah 84624

Dear Mr. Chapman:

RE: EXPERIMENTAL APPROVAL ORDER TO TEST OVERFIRE AIR SYSTEM

MILLARD COUNTY, CDS-A. ATT, NSPS TITLE V

Project Code: N0327-011

The IPSC initial request, dated April 2, 2003 for approval of the overfire air (OFA) system on the Unit 1 boiler at the Intermountain Generating Station (IGS) was received by the Utah Division of Air Quality (DAQ) on April 9, 2003. The request for an Experimental Approval Order (AO) was so that Intermountain Power Service Corporation (IPSC) could conduct research at the IGS on using OFA to control NO_x generation from coal combustion and acquire the data needed to modify the current IGS Approval Order and Title V permit.

Abstract

Intermountain Power Service Corporation (IPSC) was granted an Experimental Approval Order to demonstrate and collect data on an overfire air (OFA) system at the Intermountain Generating Station (IGS) in Delta, Utah. The IGS is a coal-fired steamelectric generating plant located in Millard County. IPSC had proposed to install a multiport OFA air system on Unit 1 to control NOx generation from coal combustion. IPSC is now requesting approval to perform additional testing in preparation for the new Maximum Available Control Technology (MACI') standards that the Environmental Protection Agency (EPA) is proposing to implement for utilities. In preparation for the new EPA MACT standards IPSC will perform several tests including but not limited to mercury testing on the OFA system. This testing will be performed to demonstrate the effectiveness of overfire in NO_x control, as well as data collection that can be used to make a final determination by DAQ in approving the continuous operation of the OFA system. Millard County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS). Subpart Da and Subpart Y apply to this source. Boiler Units 1 & 2 are also Group 1, Phase II units under the Acid Rain Program. IPSC is a major source of NOx, SO2, CO, and PM₁₀. Title V of the 1990 Clean Air Act applies to this source.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code (UAC). However, air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Experimental AO by the Executive Secretary of the Utah Air Quality Board.

Approval for trial test operation of the overfire air system is hereby granted in accordance with Section 19-2-107 (2)(e) of the Utah Air Conservation Act under the following conditions:

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- The test operation of the overfire air (OFA) system shall only be performed in the Intermountain Generating Station located in Delta, Utah.
- During the test period the OFA shall only be operated on the Unit 1 boiler.
- This Experimental Approval Order shall replace the Experimental AO DAQE-AN0327011-03 dated February 14, 2003.
- The trial test operations of the OFA shall not be performed more than 180 days from the date of this Experimental Approval Order (AO).
- All requirements of the AO DAQE-049-02, dated January 11, 2002, and the Title V
 permit 2700010001 shall be adhered to. This Experimental AO does not give approval to
 violate any conditions in the AO or the Title V permit.
- The test operation of the OPA system shall be terminated if the emissions and/or opacity limits listed in the AO DAQE-049-02 for the Unit 1 boiler are exceeded.

A report describing the results of the test operations of the overfire air system shall be submitted to the Executive Secretary, Utah Air Quality Board, attention New Source Review Section, within 45 days after the project is completed. The report, at a minimum, shall include the emissions measured, the positions of all dampers when the emissions are measured, mass airflow and all other measurements taken that are

The Division of Air Quality does not endorse the products, chemicals or equipment used in this Experimental AO.

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of this Experimental AO.

If you have any questions on the Experimental Approval conditions, please contact Nando Meli at (801) 536-4052.

Sincerely,

Richard W. Sprott Executive Secretary Utah Air Quality Board

RWS:NM:

cc:

Millard County District Health Department

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